

## CONFIRMATION OF *PROSTOIA COMPLETA* AND *SHIPSA ROTUNDA* (PLECOPTERA: NEMOURIDAE) IN MISSISSIPPI, U.S.A.<sup>1</sup>

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**ABSTRACT:** *Prostoia completa* (Walker), previously reported from Mississippi but without specific locality data, is confirmed from several sites recently discovered by personnel of the Mississippi Department of Environmental Quality, Biological Services Section, in the northern part of the state, and *Shipsa rotunda* (Claassen) is reported in the state for the first time. An updated checklist of 55 species now reported from the state is given.

**KEY WORDS:** *Prostoia completa*, *Shipsa rotunda*, Plecoptera, Nemouridae, Mississippi, U.S.A.

Stark (1980) recorded only three nemourids from Mississippi with *Amphineura nigritta* (Provancher) the only relatively common species. *Prostoia completa* (Walker) was included on the basis of a Ricker (1952) record which did not give a specific locality, and *A. delosa* (Ricker) on the basis of a single female specimen in the Bryant Mather collection. Subsequently, collections of *A. nigritta* have been made from a few sites but no new records of other nemourid species were available until a recent winter sampling program by the Mississippi Department of Environmental Quality (MDEQ) produced nymphs determined as *Prostoia* from several localities. The purpose of this study was to confirm the presence of *P. completa* in the state by collecting adult specimens at the MDEQ sites. While collecting these specimens we were surprised to find an additional nemourid species, *Shipsa rotunda* (Claassen), at one site. Specimens are deposited in the B. P. Stark collection (BPS), Mississippi College, Clinton, Mississippi, or in the Mississippi Department of Environmental Quality, Biological Services Section (MDEQ), Pearl, Mississippi, as indicated in the species accounts.

### *Prostoia completa* (Walker)

*Nemoura completa* Walker, 1852. Holotype ♂, Nova Scotia, British Museum of Natural History.

Stark (2001) lists this species from 22 states and Canadian provinces in the general region from Nova Scotia to Minnesota, south to Oklahoma and Mississippi, and east to the Carolinas. Specific records exist for Alabama (James 1972; Stark and Harris 1986) and Arkansas (Poulton and Stewart 1991), but the species has not yet been reported in Tennessee although B. C. Kondratieff has records from several counties (Kondratieff pers. com.). Ricker's (1952) specimen, a male (C. Favret, pers. com.), is listed in the Illinois Natural History Survey data base from Potts Camp [Marshall County], Mississippi, collected February 17, 1941.

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We presume this specimen was collected from Oaklimer Creek, which flows through Potts Camp, although we collected only *Taeniopteryx* specimens at this site.

**Material Examined.** Mississippi: Alcorn County, Bearman Creek, CR 771 near Lone Pine, 28 February 2002, 4 nymphs (MDEQ). Alcorn Co., Hatchie River, CR 755 near Lone Pine, 28 February 2002, 3 nymphs (MDEQ). Lee County, Twenty Mile Creek, 21 February 2001, 1 nymph (MDEQ). Marshall County, Big Spring Creek, Potts Camp Road, 15 February 2003, B. Stark, M. Hicks, 5 ♂, 5 ♀, 12 nymphs (BPS). Same site, 16 January 2001, 13 nymphs (MDEQ). Marshall County, Little Spring Creek, Wilkins Church Road, 15 February 2003, B. Stark, M. Hicks, 1 nymph (BPS).

### *Shipsa rotunda* (Claassen)

*Nemoura rotunda* Claassen, 1923. Holotype ♂, Waldeboro, Maine, Cornell University.

Stark (2001) lists this species from 18 states and Canadian provinces in the general region from New Brunswick to Alaska, south to Arkansas and South Carolina. The species is reported from Arkansas by Poulton and Stewart (1991) and Alabama (James 1972; Stark and Harris 1986), but not Tennessee. The record given below is from a creek somewhat smaller than the typical habitat for this species.

**Material Examined.** Mississippi: Marshall County, Big Spring Creek, Potts Camp Road, 15 February 2003, B. Stark, M. Hicks, 1 ♂, 2 ♀, 2 nymphs (BPS).

## Systematic List of Mississippi Plecoptera

### SYSTELLOGNATHA

#### Family Chloroperlidae

*Alloperla natchez* Surdick & Stark

*Haploperla brevis* (Banks)

*Haploperla chukcho* (Surdick & Stark)

#### Family Perlidae

*Acroneuria abnormis* (Newman)

*Acroneuria arenosa* (Pictet)

*Acroneuria carolinensis* (Banks)

*Acroneuria evoluta* Frison

*Agnetina annulipes* (Hagen)

*Attaneuria ruralis* (Hagen)

*Eccoptura xanthenes* (Newman)

*Neoperla carlsoni* Stark & Baumann

*Neoperla clymene* (Newman)

*Neoperla coxi* Stark

*Neoperla occipitalis* (Pictet)

*Neoperla robisoni* Poulton & Stewart

*Neoperla stewarti* Stark & Baumann

*Paragnetina fumosa* (Banks)

*Paragnetina kansensis* (Banks)

*Perlesta lagoi* Stark  
*Perlesta placida* (Hagen)  
*Perlesta shubuta* Stark  
*Perlinella drymo* (Newman)  
*Perlinella ephyre* (Newman)  
*Perlinella zwicki* Kondratieff, Kirchner & Stewart

Family Perlodidae

*Clioperla clio* (Newman)  
*Diploperla duplicata* (Banks)  
*Helopicus bogaloosa* Stark & Ray  
*Isogenoides varians* (Walsh)  
*Isoperla bilineata* (Say)  
*Isoperla couchatta* Szczytko & Stewart  
*Isoperla dicala* Frison

Family Pteronarcyidae

*Pteronarcys dorsata* (Say)

EUHOLOGNATHA

Family Capniidae

*Allocapnia aurora* Ricker  
*Allocapnia granulata* (Claassen)  
*Allocapnia mystica* Frison  
*Allocapnia polemistis* Ross & Ricker  
*Allocapnia recta* (Claassen)  
*Allocapnia rickeri* Frison  
*Allocapnia starki* Kondratieff & Kirchner  
*Allocapnia virginiana* Frison  
*Nemocapnia carolina* Banks

Family Leuctridae

*Leuctra cottaquilla* James  
*Leuctra ferruginea* (Walker)  
*Leuctra rickeri* James  
*Leuctra tenella* Provancher

Family Nemouridae

*Amphinemura delosa* (Ricker)  
*Amphinemura nigrutta* (Provancher)  
*Prostoia completa* (Walker)  
*Shipsa rotunda* (Claassen)

Family Taeniopterygidae

*Strophopteryx fasciata* (Burmeister)

*Taeniopteryx burksi* Ricker & Ross  
*Taeniopteryx lita* Frison  
*Taeniopteryx lonicera* Ricker & Ross  
*Taeniopteryx maura* (Pictet)  
*Taeniopteryx parvula* Banks

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